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A
SHORT TREATISE

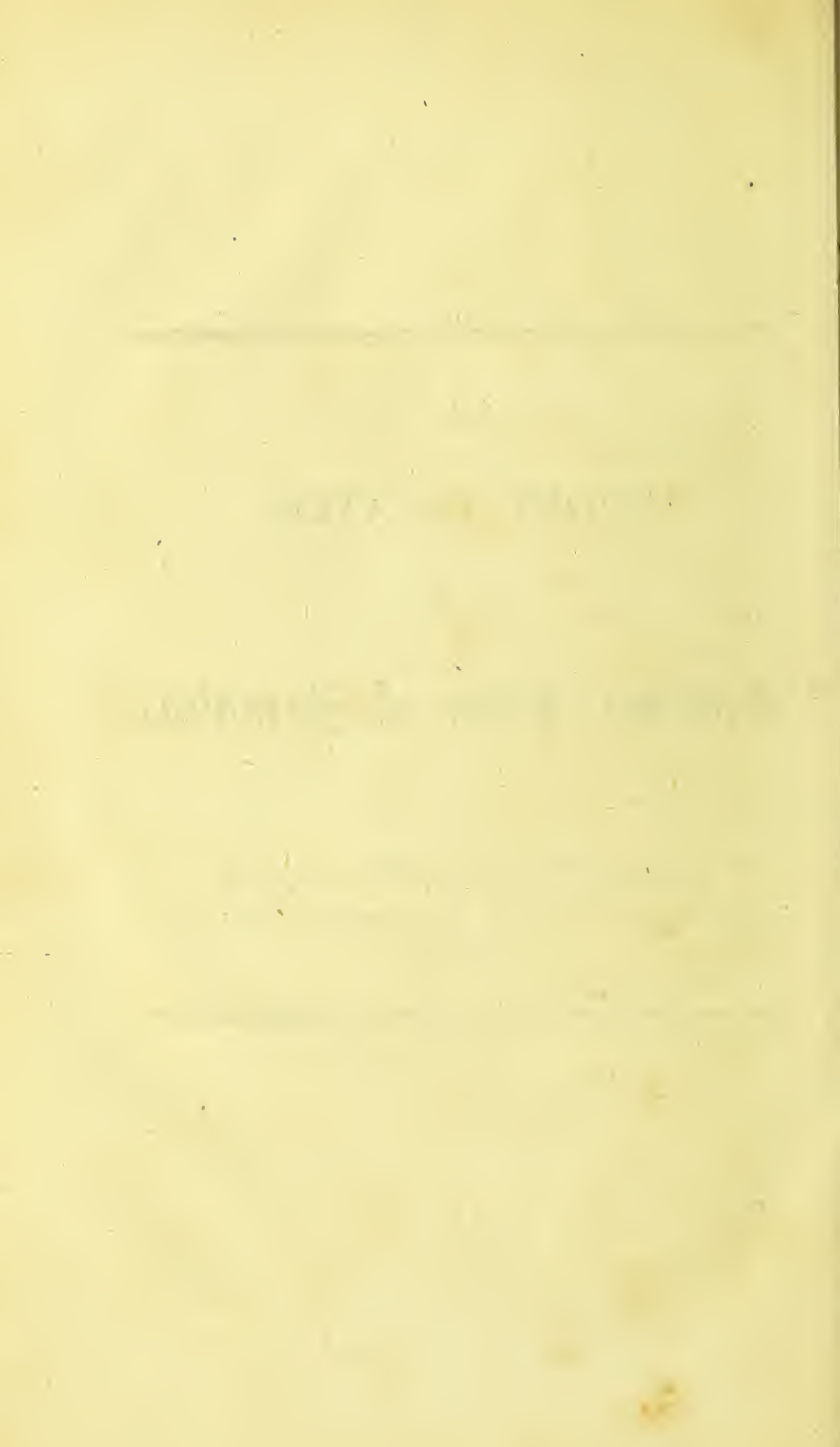
ON THE

Endemic Fever of Jamaica.

BY

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INTRODUCTION.

TO make generally known the effects of cold affusion, in the treatment of the common fever of Jamaica, was one of my principal motives for undertaking this Essay. The observations I had made respecting the value of other remedies, which my tie to society urged me to communicate, I plead as another; but I was led more especially to engage in this Publication, from having been the frequent and sorrowful witness of the pernicious effects that have arisen from the means usually employed to remove this disease, and from being impressed with a belief that many tragical scenes have occurred under their administration.

A principle of duty, founded on the persuasion of the superiority which the practice to be treated of obtains over the more popular and established, has rendered me more earnest in my endeavours to recommend it to general attention.

Whether success attend or not on my humble efforts to persuade others to adopt that plan which experience has led rational and unprejudiced physicians in Great Britain so loudly to applaud, I shall rest satisfied in having contributed all my little ability to the promotion of so desirable an end.

That I may not be accused of intruding observations unnecessarily on the public, it is proper to state, that in every instance in which I exercised the practice on others, success uniformly attended.

In my own person I have repeatedly experienced its salutary effects. Twice, when afflicted with this disease, I was prevented from following the rules proper to be observed: in both cases death had nearly been the consequence; once, through the interference of my friends, to whom the practice was new; and once, through my own inadvertency.

A SHORT TREATISE,

§c. §c.

OF THE NATURE OF OUR FEVER.

WHETHER the Yellow fever, of so common occurrence in this island, has at any period been contagious, remains yet a question satisfactorily to be answered. It has oftener than once invaded, on a sudden, a large proportion of different communities, particularly of seamen: generally, however, it has confined itself within the limits of a narrower circle; and occasionally but one individual of a numerous society has been the object of its rage. Under particular conditions of air, and constitutions of body, may there not be a form of it contagious? Let the public, then, be cautious in adopting an opinion that may lead them to a fatal security, for the point is yet at issue. To be persuaded that it is communicable by human effluvia will never prevent a conscientious medical man from endeavouring actively to discharge his duty when called upon; and nurses, though impressed with dread, will always be found ready enough to take charge of a sick bed, if tempted by the prospect of a fair remuneration. Respecting the patient, therefore, no apprehension of neglect need be entertained.

Much are we indebted to Dr. Bancroft for his strenuous exertions to ascertain the point relative to its determinate nature. I wish I could be as firmly persuaded as he is, that it arises from no other source than marsh miasmata. So far, however, I must afford my slender evidence as to the insufficiency of human contact to produce the disease, as to say, that I have never yet seen an instance in which I had any reason to believe that it was contagious; though I have witnessed cases, at different times, exhibiting all the other distinguishing marks of that which has been denominated, generally, the Yellow Fever, and yet all the domestics and friends in attendance on the individuals have escaped.

In a practical point of view, no harm can arise from regarding the Yellow Fever as an aggravated state of the Billious Remittent, the most common form under which the fever we are now considering occurs; the yellow tinge over the skin being referrible to the absorption of bile; and the dark green or black matter, dejected or vomited, being explicable on the principle of the action exerted by acids on that secretion. Blood, however, arising from ruptured vessels, stagnating in and mixing with the contents of the stomach and bowels, may impart to them that very dark tinge which they sometimes assume.

STATES OF THE BODY WHEN ATTACKED.

A variety of appearances usually precede the invasion of the fever for a few days, or to the extent of a se'nnight or fortnight; languor; general inquietude; disinclination and incapacity to perform the usual duties; want of appetite: uneasiness and heaviness; sometimes sickness of stomach

particularly on rising in the morning, or after taking food; foul tongue; dryness and bad taste in the mouth; fœtid breath; costiveness; or looseness, the stools in both cases commonly bad in colour, consistence, and smell; oppression about the forehead, not unfrequently attended with pain; disturbed sleep; inactivity of mind.

The fever, however, may invade without a warning even of a few hours.

SYMPTOMS OF THE FEVER.

Pains in the small of the back, in a greater or lesser degree, resembling those in rheumatisms; chilliness; next shivering; numbness of the extremities; nausea; thirst; strong tendency to vomit; head ache; encrease of force and frequency of pulse; return and augmentation of heat; hurried and difficult respiration; flushed face; sense of weight, with intolerable weariness of limbs; with further aggravation of these last-mentioned symptoms, until the body arrives at its highest pitch of suffering.

These circumstances may vary, but they are enumerated according to their usual order of accession. There are other symptoms besides, which occur frequently; but as they can hardly be considered essential to the nature of fever, they are consequently omitted; of delirium and coma, however, it will be proper to say, that they are generally the last symptoms which display themselves. The former is apt to come on early, when the seizure has been unexpected; it is a symptom particularly to be marked, dreaded, instantly and actively combated.

PREDISPOSING CAUSES.

When the fever attacks suddenly, the danger is imminent, as arising from its violence, and proceeds from the immediate application of one or other, or from the combination of many of the more highly concentrated causes to be mentioned under the next head, and invades in an especial manner the recently arrived from Europe, particularly if they be of a plethoric habit; prone to inflammation; subject to passion; possessed of a certain elasticity and excitability of frame. The residents of a few, or of many years standing; the natives who have never left the island, or, on their return from a colder region, have been stationary for some time, in whom there is less susceptibility of impression, from their bodies having become accustomed to the climate, being necessarily less speedily roused to action, are those to whom a warning is usually given: debility in them (more especially of the digestive organs) affording, as it were, the rudiments of fever, which may be consequent either on a sedentary, or laborious, or luxurious life. Excesses in venery; depressing passions; residence in a town; exclusion from the invigorating influence of the sea breeze; unusual close weather; derangement of the liver; the bile being either redundant, deficient, or vitiated; contribute also to prepare the body for the production of fever.

EXCITING CAUSES.

Severe or long-continued exercise, particularly under the influence of the sun's rays, or even

long-continued exposure (though the body may not be in great exertion,) to this cause in a stagnant atmosphere, as in the morning, before the setting-in of the sea breeze; overloading the stomach with food; riding; getting wet, or bathing immediately after a full meal; eating what the stomach cannot at the time digest; unwholesome liquids; a drunken fit; sitting up to an unusually late hour for a few nights in succession; ceasing from exercise under damp clothes, and not immediately changing them; exposure to marsh effluvia, especially to the damps of the night, or to wet or cold, as bathing, or a shower of rain, or a brisk current of air; a draught of any cold liquid when the body is suffering under fatigue, or in the act of, or immediately after, perspiring freely.

REMARKABLE PECULIARITIES OF THE BLACK AND MULATTO.

Mulattos are not nearly so subject to continued and remittent fevers as whites, nor are they of so fatal a tendency. Blacks appear to be but little obnoxious to either, as is proved by their being incessantly exposed, in a wonderful degree, to the whole train of causes enumerated in the preceding section. If at any time they are attacked, it is in so very slight a manner as hardly to arrest our attention. An ephemora, (or a fever of twelve hours duration,) with intermittents, are not however uncommon amongst them; but they are very slight, and soon wear off.

What are the causes of these striking differences, so observable betwixt the three shades of colour? In the black, does it arise from the oily

matter that exudes from his skin, preserving his body in a healthy state, acting as defence against the causes of fever? The facts recorded of the Romans and Grecians anointing themselves daily, afford some plausibility to the conjecture, for fevers amongst them were comparatively rare. Some salutary effect ought to be attached to the practice, from the consideration, moreover, that it was a custom exercised, in the time of the apostles, on those under disease---a practice still kept up amongst the papists. Or is the striking difference to be ascribed to the particular modes of living, from infancy up to manhood, observed by each, particularly in the articles of wine and spirits, which are seldom used among negroes; not from their indifference about them, but because they are difficult to procure? Or is it because the black has a constitution by nature which fits him to be the inhabitant of a warm climate? The black is not so susceptible of impression of any kind as the white; the former requires larger doses of medicines, generally speaking, than the latter, particularly of salts: this may be owing to the great use they are in the daily habit of making of salted provisions. That which would nauseate the stomach of a white person, will often excite no disagreeable sensation in that of the black.

It has been supposed that the comparative indifference which the African has to death is a principal cause of his exemption from the severity and fatal tendency of fever. When the mind is easily alarmed at the thoughts of dissolution, the whole frame is apt to be thrown into dreadful agitation, inducing a deplorable state of debility, in the course of a few hours hurrying on to death.

There can be no doubt that the black is less

mindful of his latter end than the white, and that he meets it, even when forewarned, with more composure.

MEANS OF CURE.

We ought to bear strongly in recollection the incredible celerity with which this fever occasionally runs its course, so that we may be decided, prompt, and vigorous in our measures ; nor defer that till to-morrow which is the duty of to-day.

From the instant the fever is fully formed, every moment becomes precious.

The indications of cure appear to be the removal of the different sources of irritation ; as the contents of the stomach and bowels ; the avoiding of all internal as well as external sources of warmth, during the paroxysm of the hot fit ; the moderating of the leading morbid changes which occur in the different functions in the progress of fever, such as the generation of heat, and increase of arterial action, and restoring tone to the whole frame, particularly by means of the digestive organs.

Various are the means that have been found effectual in arresting the advancement of fever, on its first approach. In regard to the action of some, we are lost in conjecture ; but in respect to others, the solution is easy. A vomit or purge may remove the fever when forming, as it will often do in children, by removing the cause, which was pent up within them. I have often known an emetic, and one purge or two, ward off fever when evidently impending ; and cold, all must know, is the antidote to heat.

EMETICS.

An emetic of twenty grains of ipecacuanha, taken to cleanse the stomach of its contents, should invariably precede all other internal remedies, provided nature herself shall not previously have affected that operation for us. The fever may be cut short by it, though this (however desirable) is not to be expected, our immediate object being the removal of any injesta which this organ, under its derangement, is rendered incapable of digesting; and sometimes even of expelling downwards in any form.

Should there appear a determination of blood to the head, bleeding ought always to be premised, to avoid the danger that might result from oppressed brain. In ten minutes after the emetic has been given, a tumbler of warm water with a little old rum is adviseable; the spirit has a good effect in supporting the stomach under its efforts, and in guarding it against the protracted state of languor that might ensue if it be omitted. We cannot be too cautious in avoiding the popular practice of repeating draught after draught of water, as rupture of the gullet has taken place, in the unavailing efforts of the stomach to unload itself of its contents, when much distended; considerable distension being unfavourable to vomiting. In the event of the dose of ipecacuanha given not answering, therefore, in the course of half an hour, the same measures should be repeated. Ipecacuanha deserves a rank above all other emetics in the fulfilment of this intention, as it is mild in its effects, though certain; the debility ensuing is never so permanent as that consequent on others, nor does it require that nice adjustment of quan-

tity to the peculiarity of individual constitutions which is often demanded by others of this class. On the stomach being cleared, its irritability can be brought speedily to subside, by a pledget of lint four or five times doubled, moistened by warm camphorated laudanum and ether, applied to the pit of the stomach, and renewed when dissipated, evaporation being avoided. This soothing remedy will supersede the necessity of harassing the patient by the reiterated, often unavailing, disheartening attempt of allaying vomiting, through medicines given by the mouth. Should this external application fail, however, (a circumstance which has hitherto never occurred to me,) an injection of a pint of arrow-root, blood warm, with sixty drops of laudanum, and sixty of the tincture of henbane, would, I am well convinced, settle the stomach, without inducing that continued state of costiveness which would result from opium given by the mouth; a circumstance we would always most carefully avoid. Purges never answer the purpose of emetics, when the stomach is feeble, whatever has been supposed to the contrary; and never would I trust to purging as the means of removing from that organ any matter that is offensive to it, and which I would wish to have as speedily expelled as possible. I have known three purges given in the course of two days, with the view of evacuating the injesta which was suspected, nay known by evident signs, to be pent up there, from the fear of bringing on debility by pursuing the more rational indication of vomiting. All failed to relieve the oppression in the slightest degree, though copious discharges by stool had proved the passage of these medicines through the stomach; and yet, on the administration of an emetic, a few hours after the last purge, the con-

tents of that organ were found to be great indeed, consisting of the food in the same state as when swallowed three days before ; none having been taken for forty-eight hours previous to the administration of the emetic.

NAUSEATING AND SWEATING MEDICINES.

To excite nausea and sweat is certainly improper in the treatment of this disease, as it is probable that they do good only by removing heat; which, without doubt, is better effected by means possessed of bracing powers, which will come hereafter to be mentioned. Ipecacuanha therefore should never be used with any other design than fully to vomit, and then only when the stomach is oppressed with food it cannot digest, or with other noxious matters, the presence of which would prove a greater, and certainly a more permanent source of irritation to that organ and the whole frame than would the means employed to remove them. If nauseating and sweating medicines do not effect a resolution of the fever, they must decidedly be injurious by their debilitating powers. Ought James's Powders, then, or tartar emetic, or the compound pills of calomel and opium, to be administered? The two former always excite a distressing nausea, and very generally fail in producing sweat. Was nausea ever known to do good in this fever, if unaccompanied by sweat? and how seldom indeed has perspiration, artificially raised, proved critical! The combination of opium and calomel, should it not bring on perspiration, will inevitably do harm, by increasing costiveness and irritation, (though it may not nauseate.) Is not the preternatural irri-

tability of the stomach one of the most formidable symptoms against which we have to contend, in this species of fever? How often has not this one symptom alone baffled the skill of the most eminent? Is general debility not to be dreaded? If we have recourse to unnecessary evacuations, exhaustion must be the inevitable consequence; for how is the loss to be supplied? In fever, however, arising from internal inflammation, (in which the stomach, if not itself the seat of inflammation, is seldom affected by sympathy,) and which I have only observed occurring amongst blacks, the practice of giving nauseating medicines is not only admissible, but highly commendable, after blood-letting.

BLEEDING.

This is an evacuation to which we are compelled sometimes to have recourse, however strongly we may dread debility. The propriety of employing this measure in the latter stage of this disease has been altogether denied by many. Its use is unequivocally indicated in the case of inflammation of any important organ, as of the brain, lungs, stomach and bowels, occurring at the commencement of fever. The quantity to be drawn must depend entirely on the remission of the characteristic symptoms of such an affection; it should be abstracted suddenly by a large stream, by which means less will be required to overcome the disease, and the hazard will be diminished of reducing the strength. Its repetition must depend on the recurrence and force of these symptoms. In all cases where I have employed the lancet to subdue inflammation, I have been uniformly guided by the

effects produced on the circulation, or on the pain felt in the part. It will be safe to keep the orifice open until the violence of the pain shall have abated, or until the pulse shall have begun to beat less vigorously and rapidly. It may not be improper here to remark, that in inflammations of the stomach or bowels, the pulse, instead of sinking, rises sometimes higher, and beats fuller, whilst the blood is flowing, than it did before. If it be necessary to remove crudities from the stomach, while there prevails a determination of blood to the head, bleeding ought certainly to precede the emetic. The blood may be permitted to flow till the flushing of the face subside. Before employing the lancet, we should be satisfied that it is absolutely required; we should remember the rapid strides that this disease often takes to the most extreme debility, precipitating the patient headlong to the grave.

Blacks, generally speaking, require the lancet in the proportion of ten to one more than the whites. Inflammations among them are more general than is commonly suspected; and if bleeding be omitted, chronic complaints will ensue, particularly of the lungs, incapacitating them from active labour, and rendering them fitter subjects for the hot-house than for the field.

PURGATIVES, AND EVACUATING INJECTIONS.

As early as the stomach shall be clear and perfectly settled, a smart purge should follow, with a view fully to evacuate the bowels. One ounce of phosphate of soda or of Cheltenham salts, as they are the least nauseating of all the saline cathartics, and nearly equal to any in power, are the best;

a little lime juice, added to a solution of either, will render it less unpleasant; and an orange sucked immediately after it shall have been swallowed will effectually remove any disagreeable impression from the palate which else might remain. Should the stomach prove too irritable to retain those medicines, two or three teaspoonsful of Henry's Calcined Magnesia, mixed with two wine glasses of water, may be tried, adding thereto a little anniseed or peppermint, followed by a draught of lemonade. Should this be rejected, (perhaps from its being too bulky,) a dose of common pills might answer better; or the mixture of one scruple of jalap, two of cream of tartar, half a tea spoon of sugar, and a wine glass of water, made pleasant by lime juice, may be used. An injection of senna and of salts should be employed at the same time with any of the foregoing, and repeated in two or three hours afterwards, should the medicines given by the mouth not answer the purpose.

The bowels should be kept regularly open by any of the above-mentioned means, so that two motions shall be procured the second, and two the third day, and one or two each day after, according to the appearance they may assume. If they be unnatural, the greater the necessity for evacuation. I have never yet known injections, given to empty the bowels, productive of the least harm, even when the patient had been reduced so very low as to be cold in his extremities, and incapable of swallowing, or of turning himself in bed, affording but a slight hope of recovery; on the contrary, in a few instances I have had every reason to believe that a change for the better, at this far advanced period, was greatly, if not exclusively, to be ascribed to the evacuation, by glyster, of the

putrid offensive colluvies that were found still to be deposited by the emunctories of the alimentary canal. Sometimes the bowels are loose on the first accession of disorder; this is a circumstance that ought not to deter us from the exhibition of aperients, for it is often induced by some matter passing through, or pent up in these passages, exciting the vessels to an increased secretion, or irritating the muscular coat to an inordinate action.

A teaspoonful of magnesia, with any mild aromatic, may be given frequently, with advantage, or in smaller quantities, or conjoined with a like proportion of the carbonate of lime, commonly called Prepared Chalk, to correct acidity when it prevails. Should the stomach prove so very irritable as to reject the medicines above specified, in their full or more divided quantities, all the auxiliaries having been fairly tried, and found unavailing to effect a retention, the case would demand a more frequent repetition of injections, as the means of evacuation; and at the same time it would call for some medicine possessed of strong purgative property, in little bulk, of the least tendency to excite nausea, from being tasteless, and of little sensible weight to the stomach. We would, then, regard calomel as a means of cure in this disease. It should not be given conjoined with opium, as is the usual practice, which always constipates, but by itself, in the quantity of six grains, or more, at a time, mixed up with half a scruple of white sugar, and one drop of the oil of anise, or peppermint, and repeated every hour till the desired effect be induced; for in this loose way it is soon diffused throughout the whole stomach, consequently is sooner ready to descend in its course; and though vomiting should come on, some portion

in all likelihood will be retained, to assist the succeeding dose.

MERCURY USED, FOR ITS CHARACTERISTIC EFFECTS.

Should induration, with pain of the liver, or spleen, or a vitiated state of the bile, accompany fever, mercury is certainly to be resorted to, as the medicine hitherto found best suited to their cure; and we would recommend it to be used in the form of ointment rubbed on the region of these parts, by which means a greater quantity can be introduced, so as to affect the disease, than by the mouth; and also without the distressing certainty of speedily and severely affecting the constitution. Nitric acid has been also found highly advantageous in those affections. In the West Indies, where the bodies of most are susceptible of strong impressions from the slightest dose of calomel, I have known two or three grains produce as inordinate a salivation, with its usual painful attendants, as ever I saw arise in Europe from the administration of the greatest quantity; not only rendering the patient an object odious to himself and disgusting to others, but impeding deglutation, and absolutely threatening him with death through inanition.

Under no disease do I consider salivation necessary: in all I would carefully avoid it.

If we require proof of the medicine having entered the constitution, let us rest satisfied with having affected the gums. The teeth are often injured, digestion impaired, and the breath permanently tainted, by cramming too much mercury at once into the system. Temporary debility of

the whole frame almost invariably ensues, on a course of this medicine. If the body be brought under its influence whilst fever rages, nature's power of resistance, that salutary process, must certainly be diminished. Should it not operate on the body until fever shall have ceased, clear proof will be afforded that it might have been dispensed with; and the hazard of a relapse for long after must ever be the consequence of this enfeebled state, on exposure to the slightest cause.

How often does it not occur, that the unhappy sufferer, for months, nay, years after the more immediate and distressing evils have subsided, is too often alive to the deplorable injury his constitution has sustained, reflects on the vigour of body he once enjoyed, and vainly longs for its renewal!

The advocates for the specific action of mercury use it from a belief that it is the most powerful stimulus that can be thrown into the body, to support it against the depressing agency of fever.

Some practitioners suppose that it brings on an action incompatible with that of the disease; others, that it neutralizes, or elicits from the constitution a specific poison which generated these disordered actions; and a few, that it removes obstructions, prevailing throughout the extreme vessels; but I am myself persuaded that calomel is serviceable alone by its purgative effects.

Is it not likely that mercury often modifies the constitution, so as to prepare it for the production of various diseases?

Does it not in some instances produce a disease dreadful in itself, more formidable than that for the cure of which it was administered?

We should always guard against the exhibition

of acids, when mercury is given by the mouth; for under their joint operation the mouth is readily affected.

By rubbing a liniment of camphorated laudanum about the jaws and upper part of the throat, as well as by the constant application of those ingredients, united to a little ether, on flannel, to those parts, aided by the use of two teaspoonsful of sulphur conjoined to two grains of black hennbane, to keep the bowels open, and to allay irritation, salivation, should it occur, and its train of distresses, are best and most speedily averted.

Sulphur is regarded as possessing a singular power of eliminating the particles of mercury from the constitution.

OPIUM.

The indiscriminate use of this medicine has been productive of too much evil, for me to be silent respecting it. As it is invaluable when prescribed by the judicious, so is it deadly in the hands of the unskilful. It is daily given to check vomiting, or to induce sleep, without regard to the proper period of its application. It occasions costiveness under every condition of body, which is a source of irritation to the stomach, to the bowels, and to the whole economy; and in the fury of fever, watchfulness, head ache, and delirium. All these are the sources of fever; are they not then powerfully calculated to bring on and support vomiting and restlessness?

Administered during the remission from fever, its immediate effects will be soothing, if the bowels be clear: but are no apprehensions of after evil to be entertained? Is the poison not latent for a-

while, under a specious appearance? Does it not often manifest itself grievously, if not counter-acted?

Conjoined with calomel, (a favourite practice with many,) it has been given under the hope of forcing sweat—an effect we ought never to encourage.

Some, to prevent calomel from passing off by the bowels, unite to it astringents; thus to bring the body, as speedily as possible, under its specific influence.

This combination has most ridiculously been resorted to, for the double purpose of immediately appeasing the stomach, and remotely, of evacuating the bowels.

Does not opium tend to constrict, though the operation of calomel is to unbind? Are not these two antagonist powers? Do they modify each other, so as to produce some happy effect, which as yet the unprejudiced have not been able to discover? Is the astringent quality of the opium destroyed by the mercury, its antispasmodic being retained? Is the calomel disarmed of its peculiar obnoxious powers? The answers are simple; the answers in the negative are strong, but true; for how often have not all the symptoms been aggravated by this practice, and how often has not death itself ensued?

It is allowed, generally, that opium, in small quantities, operates as a stimulus, exciting the action of the brain, heart, and muscular fibres in common, consequently inducing irritation and heat. Is it then proper to use it in the hot stage of fever? It is a well known fact, that many individuals cannot at any time take the smallest portion of opium, without consequent derange-

ment. How very guarded then ought we to be, in recommending its employment !

Drowsiness is the intermediate state between perfect repose and active sensibility ; it can be of no advantage, and should therefore be brought to terminate in the one or in the other, as speedily as possible.

To procure sound sleep should ever be one of our principal aims in fevers, for by this means the lost vigour that the spirits and constitution had sustained, through watchfulness and fatigue, is recruited, and nature thereby rendered better prepared to engage in efforts calculated to effect a recovery. We would therefore strongly recommend the use of the black henbane, from its being possessed of considerable narcotic powers, freed from those qualities of opium which are so often decidedly injurious in the treatment of fever. Like opium, however, it is apt to excite a little nausea in particular constitutions, unless conjoined with a little of some mild aromatic. Two grains of this extract is a common dose, but occasionally three or four will be necessary. I consider it my duty here to mention a remark transmitted to me by my father, regarding the effect of opium given to women menstruating in these fevers. It speedily arrests the discharge, however copious, determines the blood in an alarming way to the head, hurrying the patient into furious and dangerous delirium. I cannot speak of this circumstance from my own experience, as no case has ever occurred in which I could have put the statement to the test, had I been criminally enough disposed, after so serious a warning, to hazard the consequences. The practice to be pursued, should such an event have taken place, is to employ the vegetable acids, as vinegar, or lime juice, to destroy the narcotic

principle of the drug, to apply cold to the head, previously shaved, a blister to the nape of the neck, and blisters to the lower extremities. In such a case I am led to believe that active purging, with cupping the temples, should also be used.

In the latter stages of fever, when the generation of heat is feeble, and the powers of the body sinking, laudanum becomes a valuable auxiliary in support of the vital powers. Its effects then are cordial and bracing; and it tends to remove that low mental derangement which often will occur, where proper means had not previously been adopted. It should be given, assisted by wine, in the quantity of fifteen or twenty drops of the former, to a wine glass full of the latter, repeated at shorter or longer intervals, according to the exigency of the case.

CAMPHOR.

This medicine is very often used in the treatment of our fever; and it must be confessed I find much difficulty in discovering a proper season for its administration in this disease. It seldom indeed exerts any narcotic effect, unless in a large dose; and its tendency to excite nausea, and occasionally vomiting, particularly in a solid form, is, I should conclude, sufficiently notorious. Has it not of itself, or in combination with opium, brought on delirium, or caused fever to return? I am strongly persuaded that it has, from what I have myself seen. In a small dose, it does not usually operate as a stimulant, (according to the law of most narcotics,) though we are made sensible of its pungency when applied to our nostrils and mouths; that it acts as a refrigerant, as some

believe, reason altogether compels me to doubt. Is its use then adviseable in a disease of so hazardous and irregular a nature, conscious that we know not how to regulate its quantity, so as to produce consequences agreeable to our intentions?

RESPECTING BLISTERS AND STRENGTHENING INJECTIONS.

During the hot stage of fever, if delirium and inflammation of some vital organ be not present, blisters applied to any part, under whatever pretence, are positively injurious, by increasing irritation. Should delirium, however, approach, known by wild eyes, flushed face, quick sensibility, and incoherence of speech, and not yield to the effusion, we ought instantly to shave the head, and spread a thin cloth round the crown, keeping it constantly moist with spirits, vinegar and water, or with ether, so as by evaporation to produce cold; at the same time that we apply a blister to the nape of the neck, but not higher. Cold thus induced on the centre of the head, diminishes the capacity and restrains the action of the vessels within the brain, and consequently retards the flow of blood upwards; and the blister placed on the back of the neck promotes the flow downwards, by acting as a drain. Here then we have the joint force of two powerful means conspiring to the same desirable end, viz. the removal of the preternatural flow of blood to that organ, occasioning inordinate irritation. A blister applied to the crown, under a state of increased excitement of the brain, has been found (as I am informed) to produce an inflamed surface on the membrane immediately beneath the skull, of the same form and dimensions with itself, evincing the danger of the practice.

In the case of coma, or insensibility, characterized by great drowsiness, with pale face, languid eyes, and departing heat, a practice diametrically the reverse of what has been proposed above should be adopted. Our grand object in this case is to rouse the patient from his torpor, to life and vigour; the nervous energy demands the application of some powerful local stimulus, and no remedy that we can think of will answer our purpose better than a blister applied to the crown of the head, after warm fomentations shall have been used. Inattention to the important distinctions to be made between delirium and coma has been a cause, we are led to believe, of much erroneous, hazardous, and even fatal practice. The observations of my readers must lead them to a confirmation or a refutation of what I have on this point, with deference, been induced to offer to their consideration. In both cases the feet should be bathed in warm water; in the one, to determine the blood downwards, to relieve the head; in the other, to restore that warmth to the feet which they generally will be found to have lost. Should the extremities become insensible, the features collapsed, and should a cold, clammy, partial sweat prevail over the limbs and face, with laborious breathing, (though the heat about the body still continue even beyond natural,) immediate danger is to be apprehended; yet we ought not to despair. Cataplasms should instantly be applied to the soles of the feet, or to the palms of the hands; blisters should next succeed; and as early as one shall have risen, another should be applied to keep alive the sensibility, and to restrain the vital spark from being extinguished. I have known seven blisters and two cataplasms, as I conceived, bring round the patient, when it was expected that each breath would be the last. As

a powerful auxiliary, we should apply a flannel cloth frequently doubled, and kept moist with ether and hartshorn, to the pit of the stomach. Glysters of strong broth, having jelly or suet dissolved in them, impregnated with pepper, should not be neglected at this stage; they should, by means of pressure on the gut, be prevented from returning too speedily. If much putrescency prevail, vinegar and yeast may be added to the injection.

COLD AFFUSION.

To prepare my readers for an unprejudiced consideration, and at the same time to lead them to make a fair trial of those salutary effects that will invariably be found to result from the judicious management of ablution, in conducting the cure of fever, it will not be unimportant to call their attention to the use made of daily bathing among the Romans, particularly when the heat of the body was increased beyond the natural standard by exercise, by heat of weather, or by other means. They not only regarded it as one of their chief luxuries, but as a means highly conducive to health. That they were not mistaken in this particular seems to be established by fact, for seldom indeed were they distressed by a continued increase of heat beyond the moment of immersion; and one may easily conjecture that fevers which were forming were sometimes thus suddenly cut short. In the times of the Republic they used cold baths most frequently: in later times---in the times of the emperors, when effeminacy and corruption prevailed---they caused their temperatures to be raised. It does not appear that they prescribed water externally, in a general way, with the design of removing the settled form of fever; they

used it only for comfort and general advantage. Happily for them, however, they resorted to it whenever heat was oppressive.

Lustrations, or purifications of the body by water, were practised by the patriarchs; not so much as a ceremony of religion, as an act of cleanliness, conducive to health. These exercises, however, became afterwards enjoined as holy rites by the Jewish church.

The Egyptians, Grecians, and eastern nations, were early inured to the practice. Hippocrates was in the habit of applying cold water, partially, in fever; and Galen, who flourished many centuries afterwards at Rome, with a boldness peculiar to himself, recommended it generally, in the paroxysm of the hot stage.

The Greeks and Romans always exalted the temperature of their bodies, before emersion, by friction, by exercise, or by bathing in a hot bath; and if the body felt chilled on coming out, friction was employed to restore the proper balance of circulation with the natural heat.

The American Indians have long been in the habit of using cold bathing in fevers.

The Russian mode of bathing is singular and instructive, tending not a little to illustrate and give weight to the practice I am about to recommend. Water, as low as thirty-two, is the average temperature of their cold bath, and instead, snow is often substituted. Into this they plunge themselves, having previously induced a temporary fever by immersion in a hot bath, raised to an intense degree. This has become a daily exercise amongst them. They regard it not only as a source of luxury, but as a means of strengthening the constitution.

It has been remarked that persons of a cold or

leucophlegmatic temperament agree but ill with cold bathing in a state of health; but when preternaturally heated, are advantaged by the practice.

In modern times, a better method of investigation than was pursued at any former period in the science of medicine, aided, it must be confessed, in a great degree, by accident, has established the laws of the animal economy respecting health and disease upon less erroneous principles than were known to the ancient physicians.

The art is now more successfully practised; and we are still to hope that further industry, observation, and talent, supported by a love of truth, will ere long remove many of the uncertainties and embarrassments wherewith the profession is yet encumbered.

Our attention to cold bathing, regularly prescribed as a means of cure in fever, was first awakened by the eastern physicians; the rules observed by them in its application are not precisely ascertained.

Sir John Floyer and Dr. Edward Baynard were the original promoters of this salutary practice in Great Britain, as far as my information extends. Amongst the many disorders in which they have found it useful, they have enumerated fevers. They speak particularly of its influence in removing the high delirium of typhus and small-pox which is apt to arise in the paroxysms of the hot stage.

Their omission to mark the periods at which it would prove decidedly useful, must excite regret. There is a precision necessary in medicine. They use ambiguous terms, as "when the enemy is at the door." They must mean at the commencement of the hot fit.

To Currie, then, are we especially to return

thanks for the full, clear, and admirable rules which his benevolence and well-directed talents have transmitted to us as our guide in practice, and we shall be wise in strictly pursuing them.

The powers of the cold affusion in removing fever has only been generally known within these very few years. The practice was familiar to him for some years previous to the publication of his Reports. This remedy removes the fever at the moment of affusion, by abstracting heat from the body; but this circumstance is not sufficient to account for the permanency of its effects. Does it not act by bracing and invigorating the whole frame, thus imparting a steadiness and healthiness to the motions and powers of each fibre, previously made irregular by means for which we can in no way satisfactorily account?

Does it act by its shock, bringing on an action incompatible with that of the disease; or by breaking the link of associated motions; or by overcoming the observance of diurnal revolution? to borrow the language of a Hunter, a Darwin, or a Cullen. In whatever way it acts, its powers are decisive, and unquestionably great and salutary. Of itself, it has often, in slighter cases, superseded the necessity of our having recourse to any auxiliaries besides an emetic, and one or two purges. Let us then consider under what circumstances the cold affusion should be summoned to our aid, so that we may not unnecessarily delay its use, nor resort to those means that have too generally failed in the hands even of the most skilful, when we can command those certain and happy results which may always be expected to follow the judicious and timely use of this excellent remedy; and that we may guard against those certain bad, and often fatal, consequences

which will ensue, sooner or later, on its employment at an improper season. Such an improper application would be the means of bringing unmerited odium on a practice which, if pursued under proper instructions and management, may be accounted among the greatest improvements that any age ever introduced into the science of physic.

Its efficacy in removing irritability of stomach, increase of temperature, anxiety, thirst, quickness of pulse, head-ache, and delirium in the paroxysm of the hot-fit, together with its power of almost immediately restoring appetite, spirits, strength, and sleep, cannot possibly be imagined: they must have been witnessed fully to be credited. Its application at this period, when the fit is fully formed and raging, will not only suspend, for a certainty, the renewal of the disease for a short interval, but will often altogether extinguish it; generally, however, there will be found occasion to repeat it more than once. Let me not omit to mention, that the disease has recurred after the twenty-seventh time of affusion, but happily yielded to the twenty-eighth, during a period of two days.

This protracted succession of paroxysms (notwithstanding the diligent use of the cold affusion) I have been, in a great measure, led to attribute to the stomach and bowels not having been thoroughly cleansed of the matter that was stagnating and corrupting in them, occasioning general disorder, acting as an incessant exciting cause. I was led to this supposition by the readiness wherewith the fever gave way, under the use of the cold affusion, on the stomach and bowels being emptied of their foul contents.

Such often has been the astonishing power of

this remedy, that the patient who, the moment before, had been carried to the place where the water was to be poured over him, through absolute inability to move by his own efforts, after its application has advanced with firmness to his bed, unassisted by others.

Though mercury may have been employed, though inflammations of any part of the body may be present, still this remedy is not to be omitted.

The symptoms which more immediately denote the necessity of the cold affusion are, quick pulse, hot and dry skin : the temperature should always be ascertained with precision, and this is to be done by means of the thermometer alone.

The above symptoms of themselves are enough to urge the use of the affusion, independently of hurried breathing, restlessness, thirst, head-ache, pains about the loins, vomiting, and delirium.

When the propriety has been determined upon of using this remedy, the patient should be removed to a large tub, stripped, and therein seated ; then one or two pails full of cold water should be thrown over his head ; he should be conducted back to his bed, wiped dry, and kept cool, by exposing his arms and legs to the air, having no other covering applied to his body but his shirt ; there to remain, and, if possible, to sleep ; or to await the return of the fever, which may generally be expected in the course of half an hour, an hour, or a little more, to have all that had been previously done repeated. Should his feet, after the affusion, feel cold, friction should be applied to them ; they should be wrapped in flannel, and there kept until the natural temperature shall have been restored. The patient will generally experience a considerable shock on the applica-

tion of the water, which may, at first, be so very unpleasant as to lead him to decline a further trial, though sensible of the good it has already done him: he should, however, be encouraged to a repetition of the practice, by the fact that the oftener it is employed, the less disagreeable it becomes, till, at last, the sensation is rendered not only tolerable, but really agreeable; insomuch that the patient, after the third or fourth, (if a further repetition be necessary,) will often call for it himself.

In a case of fever, attended with a vomiting of blood, brought on by the violent agitation of the stomach, I marked, with wonder and satisfaction, the effect of the cold affusion.

The symptoms of fever ran high, the discharge of blood was copious and alarming to an extreme degree; none of the remedies usually prescribed were at hand to abate the latter; the cold affusion was indicated by the former; it was applied: the fever instantly gave way, and the hæmorrhage ceased.

Here let it be strongly impressed upon the mind, that this remedy should never be thought of when the body is chill, or under profuse perspiration, or immediately after it; more especially if it shall have flowed for some time, or when the temperature is not above natural. At such periods danger would impend upon its use; death, perhaps, might be the immediate consequence, as the records of medicine, alas! amply testify, under indiscreet and criminal management.

Should the patient's antipathy to the cold affusion be so rooted as not to be overcome, we ought strongly to recommend immersion for a minute or two in a bath: its power in breaking this disease must, however, yield to that of the

former. Before he descends into the bath, his head should be thoroughly wet. Should our endeavours to gain this point fail also, we ought next to urge the sponging the surface of the body all over. Should this also be resisted, may we not employ an injection of cold water by itself, or conjoined with nitre, or with any other refrigerant, to make a strong impression on the body? I am persuaded that it would answer, in a considerable degree, the purpose of the cold affusion. From this remedy no harm need be apprehended; for I may mention here a very important practical fact which has occurred in Great Britain, to give credit to the suggestion. In inflammations of the bowels, injections of ice-cold water have been employed with the happiest effect, together with the application of ice to the abdomen: no harm then need be apprehended from the use of water, the average temperature of which is about seventy, or a little more. Should none of these means be adopted, we would next think of employing the tepid affusion, or immersion in the tepid bath, for one or two minutes.

Pains about the loins can best be alleviated by friction about those parts, with camphorated henbane. Laudanum may be used, but it might, by its astringent nature, increase the tardiness of the bowels.

CHANGE OF SITUATION.

On the slightest remission of fever, change of air should instantly be recommended. If the patient be in town, he should ascend into the country. If he be on an estate or settlement, he should remove a few miles from the place of his confinement. Airy and elevated situations within

the benign influence of the sea breeze should be sought. The removal should be by means of a carriage, betwixt the hours of five and seven in the morning, or in the evening; the sun's rays should be kept off by means of a screen raised over the patient.

On this head I am persuaded that too great stress cannot be laid, however much it has hitherto been disregarded.

The fever that came upon me last in Jamaica led me to determine on leaving the island. My constitution had been reduced so very low, from the reiterated attacks which had preceded, that it was scarcely able to resist the violence of the one to which I now allude, notwithstanding the diligence I had used in applying those means which in former instances had proved so successful. On the third day, the disease, though it had received repeated checks from its commencement, had abated but little of its original violence. My strength was dreadfully exhausted. The cold affusion here, of itself, had certainly less influence in bringing the disease to a speedy termination than I expected; I apprehend from my body having become accustomed to its shock, in consequence of the frequent use I had been compelled to make of it. I therefore resolved on trying the effect of change of air, in aid of this remedy, having before experienced its good effects at less critical periods of the complaint: accordingly about five o'clock in the morning, whilst the paroxysm of the hot fit was raging, I had myself well soused, so as to be thoroughly cooled; then, weak as I was, conveyed, by means of a gig, a few miles off. What followed corresponded with my most sanguine wishes: the disease disappeared, and in a few days I was enabled to engage in my duties as usual.

There is no degree of cold necessary in the cure of any one complaint which may not be found in Jamaica, by ascending to the more lofty, mountainous positions. This is indeed an inestimable advantage afforded by our country, one which we cannot appreciate too highly. How strange then, that it has so very seldom been taken into account either by practitioners or valetudinarians themselves ! It is an advantage that would fully answer all the purposes of an expensive voyage to Britain, for the restoration, to any individual, of that vigour which may have been exhausted or impaired by the heat of a sea side residence, and by the fatigue of business. Care should be taken to guard the body, by suitable clothing, against the bad effects that might arise from a change of temperature.

Were situations of this kind selected and properly ordered for the accommodation of convalescents requiring removal from the hurry and bustle of active life, for a few weeks or months, (as the particular complaint, or the peculiarity of constitution may demand,) to a climate so far European as to demand the comfort of fires during the day, and blankets during the night, what an inestimable blessing would not this simple measure afford to every individual throughout the island requiring the aid of a more bracing atmosphere !

As early as the patient shall be sufficiently recruited in strength, he should exercise himself gently on horseback. Early in the morning, or towards the close of the evening, are the periods best adapted to this purpose, when the sun shall be least powerful. He should carefully avoid fatigue, cold, wet, and, above all, marsh miasmata. Should the individual, however, be restricted to his own home from choice or necessity, and

should he live near the sea, boating should not be neglected, as it is very restorative, if enjoyed in the cool seasons of the day, and if it do not occasion sickness. To recruit the spirits and speedily bring back health, chearful company and change of scene possess no little influence.

Should the convalescent at any time feel an increase of heat without perspiration, or without a previous sensation of cold, he should immediately use the shower bath, or immersion for a few minutes. If the feeling of heat, however, be preceded by chilliness, it would be improper to use cold water until the hot fit shall have fully formed. Then, and not till then, will it be admissible; an emetic and purgative preceding its application.

EFFERVESCING DRAUGHTS.

A saline alkaline draught, composed of a scruple or half a drachm of the carbonate of potash, or soda, dissolved in a wine glass of water, mixed with half a pint of lemonade, and in the act of effervescing swallowed, will be found not only most grateful, but highly conducive towards keeping up the good effects resulting from the shower bath, and may alternate with the stomachics.

TONICS.

As early as an intermission of three hours shall occur, we should begin to give bitter tonics, to support the good effect of the preceding remedies. At first the milder and less nauseating ought to be employed; twenty, thirty, or sixty drops, therefore, of the tincture of madjo bitter, diluted with half a glass of water, should be administered every third hour, (allowing a mouthful of white

wine, or the juice of an orange, after each dose, to remove any unpleasant taste from the mouth that the medicine may have left; or a wine glass full of the infusion of bitter wood; or half a wine glass of the vinous preparations of either of the two foregoing, or of the Peruvian bark, may be substituted. The vinous preparations of these medicines afford us a neat form (and certainly the least disgusting,) under which their virtues can be exhibited: they are convenient, from admitting of being speedily prepared. The madjo is slightly aperient, and the same may also be said of bitter wood. Bark acts on some individuals as an aperient: on others, as an astringent. It should be remembered that we meet with certain constitutions which agree with one medicine, and not with another; and some few that may be deranged by the use of very little spirits.

Should four-and-twenty hours elapse without a recurrence of fever, and should the stomach during that time remain settled, great hope may be entertained that the disease has received such a check as to yield entirely to a little prudent management; at this time, therefore, (not sooner) the powder of the Peruvian bark, in the quantity of a scruple, should be prescribed; and if it do not occasion headache or flatulency, or sickness at stomach, or increase of temperature, (signs which would contra-indicate its use,) it should be repeated every third hour, in the quantity of one drachm. Should it, however, occasion derangement of this organ, we ought instantly to desist from its exhibition, and to make trial of the extract, (prepared by alcohol and water,) or of a decoction, or infusion, or again recur to the bitters.

Conjoining a mild aromatic with a medicine which by itself the stomach has rejected, will often enable

that organ to retain it, though it may be very nauseous. It would be highly improper to engage in any further attempts to reconcile the stomach to that form of the bark which it has been found to reject, more especially as we can command, in the other medicines, virtues more congenial with the peculiarity of individual constitutions.

Many, I am aware, will deny the propriety of laying aside this medicine under any circumstances, considering it as the sovereign remedy in the cure of this disorder; the expediency, therefore, of deferring its exhibition until an evident remission of twenty-four hours shall have taken place, will be accounted by them extremely impolitic and unpardonable; but to such I have only to say, that they perhaps neither tried the effects of cold affusion, nor those of the tonics already spoken of, which are decidedly effectual in their operation of strengthening the stomach. Moreover I beg leave to refer them to the facts daily occurring of the very few cases in which bark, in substance, has been found to sit lightly on the stomach, under an intermission of shorter duration than that which has been mentioned; and though the fever should remit for one hour, for two, or for three, does this little interval afford us any probable grounds for believing that the disease will not re-appear ere another shall have passed away? It is of importance to remember the insidious nature of this fever. If the state of uncertainty then be so great, does not reason point out how necessary a certain delay is? Does it not mark the impropriety of hazarding a practice, which, if it fail to do good, must inevitably harm? Should the hot fit recur, after several drachms of this medicine shall have been swallowed, what is likely to be the consequence? Under the oppression of

heat and universal derangement, can a probability arise that this medicine will be digested? Will it not rather prove a means of irritation, whether it excite vomiting or not? We are informed, on the respectable authority of Dr. Trotter, that many patients in fevers, who have taken much bark, have thrown it up again days afterwards, undigested.

I am convinced that the nausea and vomiting so frequently occasioned by this medicine, has, in many instances, brought on a most alarming debility, not only in the stomach, but throughout the whole frame; and even been the cause of a renewal of fever, and, if longer persisted in, death itself.

In inflammations of any vital organ, bark is certainly not to be administered.

REGIMEN.

As regimen forms no inconsiderable part of the method of cure, it will be proper to mark the more important circumstances respecting it.

Food ought never to be forced on the stomach contrary to the patient's inclination, at any stage of this disease, as it can effect no good, (the want of appetite proving that the powers of digestion are too much impaired to engage in this process with advantage,) but may be productive of much oppression and general derangement.

During the paroxysm of the hot fit, it should never be thought of.

On the intermission, it is admissible only when called for by the patient; at which time the milder kinds ought to be used, as Indian arrow root, sago, gruel, thin plantain pap, chicken broth, or beef tea. His particular choice of either should be attended to. The quantity given each

time should be sparing, but it may be frequently repeated.

The above articles may be administered with the greatest benefit, by injection, on the slightest remission from fever.

When the remission shall be well marked, by the exemption of three or four days from fever, the patient may venture, if he feels disposed, on fish, soup, jellies, chicken, lamb, the lean of pork, and game: to these he should add a due proportion of wholesome vegetables, well boiled, as of ocroes, (than which none are better,) seed or mealy yams, dry pumpions, bread-fruit, chocoes, and french-beans. Green plantains are hard of digestion, and so are cocoes.

The patient should be careful to guard against répletion, as it might lead to a relapse; for the appetite of a convalescent is generally greater than his powers of digestion. He should, therefore, at this stage, be as careful to eat little at a time, but frequently, as at a more critical period.

Wine should never be administered during the hot fit of fever.

On the remission, it will prove of considerable service, provided it agrees with the stomach of the patient, and does not occasion a return of heat, or an increase of circulation.

The greater the debility, the greater, generally speaking, is the demand for it; and the greater is the quantity to be used.

Wine may be found to derange a few constitutions. Under such a circumstance, good old rum, diluted with water, may be employed; or any other spirit that may be more congenial with the taste and particular habit of the individual.

In the cold stage of fever, cold applied in any form would be highly improper and dangerous;

at this time, therefore, the use of warm tea made from lemon grass, virvine, sage, or baum, will prove most acceptable to the patient, and salutary, in particular, that made from the lemon grass.

During the prevalence of the hot fit, or on its cessation, tamarind water, the juice of the orange, shaddock, forbidden-fruit, cocoa-nut water, or the expressed juice of the water melon, may be freely allowed to the patient, to quench thirst.

CONCLUSION.

Should the remarks which I have ventured to offer in the foregoing sheets prove the means of averting death from any individual, or of alleviating the sufferings of even the meanest member of society, I shall consider myself more than recompensed for the pains I have bestowed in collecting and arranging the observations which practice, during a residence of a few years in my native country, enabled me to form, relative to our endemic fever. In this undertaking, common advantage was my principal motive. There yet remain, however, two points of importance, which I would, if possible, impress strongly on the minds of my readers. On those not of the profession, the unspeakable advantage of applying to medical assistance the moment that fever appears to be forming; for by an imprudent delay of this nature, I am well convinced that many a fever has advanced to an alarming height, which in every probability would have been entirely subdued in the

space of a few hours, by the timely interference of proper art : on those of the faculty, the great necessity of self-command, and of unwearied assiduity, as should arise from a just sense of the high responsibility that devolves on them, from the nature of their professional calling. Many medical men, I am sorry to affirm, are too apt to view the progress of danger with indifference, or to take alarm at its near approach; disconcerting their powers of reason, disarming themselves for action, and, in despair of success, criminally surrendering every manly effort in the hour when called upon most loudly for their services; instead of confidently resorting to the mental resources of which they ought to be possessed at this critical juncture, raising them superior to difficulties, by which alone they can look with complacency on their own conduct, discharge their duties with becoming firmness and with probable success: they should approach the patient's bedside fortified with a strong recollection of past events in practice thoroughly arranged, determined to vary their line of conduct as circumstances, incident to particular conditions of life, or peculiarities of constitution, invariably indicate—peculiarities, of which every medical man should be fully aware, and such as a judicious investigation alone would tend to disclose: for there is no complaint in which the rules of the empiric are less to be regarded, or the judgment of the practitioner more to be evinced, than in this. Let it be our duty never to despair; for we have seen what judgment, in the application of remedies, has been able to effect, under a pressure of every untoward symptom---of every one that can be reckoned amongst the number of those that are generally mortal. It is the case replete with danger, from the irregularity and complication of its

symptoms, hastening each moment to fatality, requiring all the powers of memory, all the energies of the understanding, to be collected, as it were, into one focus, that allows the skilful to be distinguished from the feeble practitioner.

THE END.